SULLIVAN, MOUNTJOY, STAINBACK & MILLER PSC

ATTORNEYS AT LAW

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JAN 2 1 2015

PUBLIC SERVICE COMMISSION

Ronald M. Sullivan

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R. Michael Sullivan

n. n.n. 11

Bryan R. Reynolds*

Tyson A. Kamuf

Mark W. Starnes

IVIAIR IV. OLZIIII

C. Ellsworth Mountjoy

John S. Wathen

*Also Licensed in Indiana

January 20, 2015

Via Federal Express

Mr. Jeff Derouen Executive Director Public Service Commission 211 Sower Boulevard, P.O. Box 615 Frankfort, Kentucky 40602-0615

RE: BIG RIVERS ELECTRIC CORPORATION'S FILING OF WHOLESALE CONTRACTS PURSUANT TO KRS 278.180 AND 807 KAR 5:011 §13, CASE NO. 2014-00134

Dear Mr. Derouen:

Enclosed for filing are an original and ten (10) copies of (i) Big Rivers Electric Corporations' response to the information requested at the hearing in this matter; and (ii) a petition for confidential treatment. I certify that on this date, a copy of this letter, a copy of the response, and a copy of the petition were served on each of the persons listed on the attached service list by first-class mail.

Sincerely,

186

Tyson Kamuf Counsel for Big Rivers Electric Corporation

TAK/lm Enclosures

Telephone (270) 926-4000 Telecopier (270) 683-6694 cc: Lindsay Barron, Big Rivers Electric Corporation DeAnna Speed, Big Rivers Electric Corporation Service List

100 St. Ann Building PO Box 727 Owensboro, Kentucky 42302-0727

Service List PSC Case No. 2014-00134

Michael L. Kurtz Kurt J. Boehm Jody Kyler Cohn BOEHM, KURTZ & LOWRY 36 E. Seventh Street, Suite 1510 Cincinnati, OH 45202

Lawrence W. Cook Jennifer Black Hans Angela M. Goad Assistant Attorneys General 1024 Capital Center Drive Suite 200 Frankfort, KY 40601-8204

ORIGINAL



Your Touchstone Energy® Cooperative

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

BIG RIVERS ELECTRIC CORPORATION'S FILING) OF WHOLESALE CONTRACTS PURSUANT TO) KRS 278.180 and 807 KAR 5:011 §13	Case No. 2014-00134
OF WHOLESALE CONTRACTS PURSUANT TO	

Response to the Kentucky Industrial Utility Customers, Inc.'s Post-Hearing Request for Information dated January 13, 2015

FILED: January 21, 2015

ORIGINAL

BIG RIVERS ELECTRIC CORPORATION

BIG RIVERS ELECTRIC CORPORATION'S FILING OF WHOLESALE CONTRACTS PURSUANT TO KRS 278.180 and 807 KAR 5:011 §13 CASE NO. 2014-00134

Response to Post-Hearing Request for Information Dated January 13, 2015

January 21, 2015

1	Item 1) Summarize the changes in the assumptions that were used in the October
2	30, 2013, Valuation and Risk Assessment of Energy and Capacity Sale to Nebraska
3	Entities for Big Rivers Electric Corporation performed by ACES (the "ACES Analysis")
4	described by Ms. Barron at the beginning of her testimony during the hearing on
5	January 13, 2015. Provide any related written correspondence.
6	
7	Response) During my testimony at the hearing in this matter, I described three changes to
8	the assumptions used in the ACES Analysis. These changes do not materially alter the
9	outputs of the study or support changing Big Rivers' conclusion that the Nebraska
10	Agreements are reasonable.
11	The first change relates to the assumption in the ACES Analysis that the cost of
12	MISO transmission (estimated at approximately would be fully offset by the
13	locational marginal pricing (LMP) differential between Big Rivers' generation and the
14	delivery point (MISO.NPPD). MISO has changed the way it calculates the MISO.NPPD
15	node LMP. Previously, MISO calculated each SPP interface node individually; now, MISO
16	is averaging all SPP interface nodes. This change in MISO's calculation lowers the LMP
17	basis differential estimate to
18	The second change relates to the fact that in the study ACES did not include the
19	transmission revenue which Big Rivers will receive as an offset to the cost of the MISO Case No. 2014-0013

BIG RIVERS ELECTRIC CORPORATION

BIG RIVERS ELECTRIC CORPORATION'S FILING OF WHOLESALE CONTRACTS PURSUANT TO KRS 278.180 and 807 KAR 5:011 §13 CASE NO. 2014-00134

Response to Post-Hearing Request for Information Dated January 13, 2015

January 21, 2015

1	transmission. A more appropriate assumption is that of the cost of the transmission will
2	be offset, making the net transmission cost approximately , instead of the
3	assumed in the ACES Analysis.
4	As a result of these two changes, the ACES Base Case margin should be reduced by
5	slightly less than (which is less than because all MWhs are not
6	impacted as the purchase of SPP transmission from the Nebraska entities eliminates the need
7	to purchase an estimated of MISO transmission).
8	The third change relates to the fact that over the last several months, market volatility
9	may have caused a change in the market price assumptions used in the ACES Analysis. As
10	such, Big Rivers asked ACES to provide a comparison of the Wood Mackenzie market prices
11	current at the time of the original analysis to the newest Wood Mackenzie market prices.
12	The results of that comparison are attached hereto, along with a related email from ACES.
13	
14	Witness) Lindsay N. Barron

Wood Mackenzie Pricing Data

Wood Mackenzie provides Base Case (including carbon) Price Forecast around June/December of each year

ACES forward curves rely on a No-Carbon case that Wood Mackenzie provides subsequent to the release of their Base Case Price Forecast

The No-Carbon case is typically provided in late July/August and January/February, following the Base Case releases

Old: The most recent Wood Mackenzie data at the time of the October 30, 2013 report would have been the July 31, 2013 (May 31, 2013 Base Case) No-Carbon case

New: The current Wood Mackenzie price data is based off the July 15, 2014 (May 31, 2014 Base Case) No-Carbon case

Indiana Hub prices would be based on the Short-Run Marginal Cost (SRMC) price curves from Wood Mackenzie

July 31, 2013 No Carbon Case

October, 2013 Report

On-Peak Power Prices (SRMC, Nominal \$/MWh)

MISO Indiana	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Off-Peak Power Prices (/MWh)											-			-					187	
MISO Indiana	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Average Power Prices (S	RMC, N	ominal \$/	MWh)													35			22.3			3	
MISO Indiana	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035

July 15, 2014 No Carbon Case

Most current

On-Peak Power Prices (SRMC, Nominal \$/MWh)

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 MISO Indiana

Off-Peak Power Prices (SRMC, Nominal \$/MWh)

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

Case No. 2014-00134

Post-Hearing Data Request Item 1 Attachment

Page 1 of 2

MISO Indiana																				-			G_
Average Power Pric	es (SRMC, N	ominal \$	/MWh)																				
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MISO Indiana																					1		

Comparison % change from 2013)

On-Peak Power Prices (SRMC, Nominal \$/MWh)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MISO Indiana									-														
Off-Peak Power Prices (SRI	MC. N	ominal \$	/MWh)																				
		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MISO Indiana																							

Barron, Lindsay

From:

Moore, Matt

Sent:

Monday, January 12, 2015 5:27 PM

To:

Barron, Lindsay

Subject:

Fwd: Wood Mac Price Comparison

Attachments:

image003.png; ATT00001.htm; Wood Mac Pricing Comparison_011215.xlsx;

ATT00002.htm

Sent from my iPhone

Begin forwarded message:

From: Ted Vatnsdal < tedv@acespower.com > Date: January 12, 2015 at 6:22:02 PM EST

To: "Moore, Matt" < Matt. Moore@bigrivers.com >, Jason Painter < Jason P@acespower.com >

Subject: Wood Mac Price Comparison

Matt/Jason-

Matt called and asked for a comparison of old Wood Mackenzie curves for the NeNPPD sale compared to more recent price curves. The prices we had at the time of your report (Jason) would have been the summer No-Carbon case, provided July 31, 2013. The most recent price curves (No-Carbon) ACES has from Wood Mackenzie are from July 15, 2014. Here is that comparison (attached Excel file).

Jason- if this is from your Figure 21 in the Big Rivers report, can you recall how much of the price data would have come from Wood Mackenzie versus broker quotes, and are broker quotes something that you need Matt? Here is that section from the report. I don't know why 2021-2026 was highlighted in the table, it may be only that the capacity value was escalated beyond that period. I didn't find an Excel file with the table in it, but I didn't search that hard either.

5 Wholesale Market Alternatives

While the Nebraska Loads represent one opportunity to start replacing load in the Big Rivers portfolio, another strategy is for Big Rivers to wait for a recovery in wholesale energy market. Figure 21 displays potential revenues based upon a Wood Mackenzie energy price forecast and a recent capacity transaction for 2017-2021 around escalated at per year for the remainder of the period. This scenario would result in a improvement in margins above the base case. It is important to note, however, that there is no ability in the current market to transact beyond 2018 and thus there is no ability to lock in the potential wholesale market improvement, unlike what the sale to the Nebraska Loads may provide. As discussed, ACES assumed capacity prices at a recently transacted price; however, using the Wood Mackenzie projection for capacity prices would result in higher projected margins.